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**DEPARTMENT OF PLANNING
STAFF REPORT**

BOARD OF SUPERVISORS PUBLIC HEARING

Date of Meeting: October 10, 2006

SUBJECT: CPAM 2005-0003, Upper Broad Run/Upper Foley Policy Subareas

ELECTION DISTRICT: Dulles

CRITICAL ACTION DATE: November 26, 2006

RECOMMENDATIONS:

PLANNING COMMISSION RECOMMENDATION:

Planning Commission: On August 28, 2006 the Planning Commission voted 6-2-0* (Elgin, Klancher, Syska, Ruedisueli, Volpe, Whitmore – yes; Doane, Hsu—no) to forward CPAM 2005-0003, Upper Broad Run/Upper Foley Transition Subareas to the Board of Supervisors with a recommendation of approval.

Staff: Staff does not support the Planning Commission recommendation. The proposed expansion of suburban residential densities into the two Subareas is based on inadequate assessment of impact and planning for mitigating road and service impacts. Staff recommends further discussion of the potential fiscal and transportation impacts of the proposed land use changes.

EXECUTIVE SUMMARY

On August 28, 2006, the Loudoun County Planning Commission voted to forward CPAM 2005-0003, Upper Broad Run/Upper Foley Transition Policy Subareas to the Board of Supervisors with a recommendation of approval. The proposed policies increase residential densities providing for a suburban design pattern in the Transition Policy Area. The recommended draft policies and maps make the following policy changes (Attachment 1):

- Provide for residential densities up to 4 dwelling units per acre in the two Subareas, in a mixed use land use pattern;

* The Dulles District did not have representation present with the resignation of Commissioner Beerman.

- Designate areas for higher residential densities at key intersections;
- Change the Revised General Plan Planned Land Use Map for properties north of Route 50 from Industrial Community to Business Community; and,
- Provide policy direction for unmet housing needs.

DRAFT MOTIONS:

1. I move to refer CPAM 2005-0003, Upper Broad Run/Upper Foley Transition Policy Subareas Comprehensive Plan Amendment to a Committee of the Whole meeting for further discussion.

OR

2. I move the Board of Supervisors forward CPAM 2005-0003, Upper Broad Run/Upper Foley Transition Policy Subareas, as set forth in Attachment 1, to the November 7, 2006 Business Meeting for action.

OR

3. I move an alternate motion.

INTRODUCTION

The Upper Broad Run and Upper Foley CPAM is based on six applicant-initiated CPAMs for properties located within the Transition Policy Area and parts of the Suburban Policy Area that were accepted for review by the County in November 2004. The six applicant-initiated CPAMs proposed specific policy changes to the Comprehensive Plan to provide for a different community development pattern and increased residential densities in the Upper Broad Run and Upper Foley Subareas, and in portions of the Suburban policy areas. On March 1, 2005, the Board directed that these six applicant-initiated CPAMs be consolidated into one review of the area that encompasses all properties within the Upper Broad Run and Upper Foley Subareas and a portion of the Suburban Policy Area.

The Planning Commission followed a process that includes the typical components of Plan policy development such as, community outreach, issues discussions, and drafting of policy language. The Commission provided several opportunities for public comment as the plan policies were being developed (Attachment 3, Scope of Activities). The Planning Commission held a public hearing on the proposed CPAM on October 3, 2005. Dozens of citizens spoke at the hearing, while more than 25 people provided taped comments.

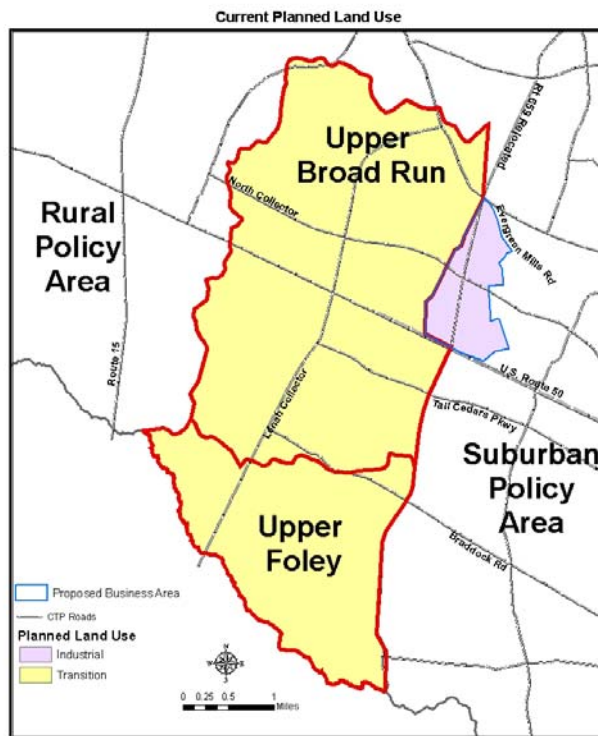
On July 18, 2006, the Board returned the CPAM to the Commission for the purposes of holding a Public Hearing (in order to provide additional time for Board review). On August 28, 2006 the Planning Commission held a Public Hearing. Over eighty members of the public spoke at the public hearing both in support and opposition of the CPAM. The Commission also received many written comments and taped comments supporting and opposing the CPAM. The issues raised by speakers included land use concerns, transportation impacts and increased service demands. The Commission also received written comments from Fairfax County regarding transportation impacts on regional roads and potential impacts to the Occoquan watershed, a drinking water source for Fairfax County (Attachment 5). At the August 28th Public Hearing the Town of Middleburg presented a Town resolution opposing the proposed CPAM citing increased traffic as a threat to the financial health and well-being of the Town (Attachment 6).

CURRENT PLAN POLICIES

The Upper Broad Run Subarea comprises a total of approximately 6,400 acres divided among approximately 600 parcels. The Upper Foley Subarea comprises a total of approximately 2,800 acres divided among approximately 90 parcels.

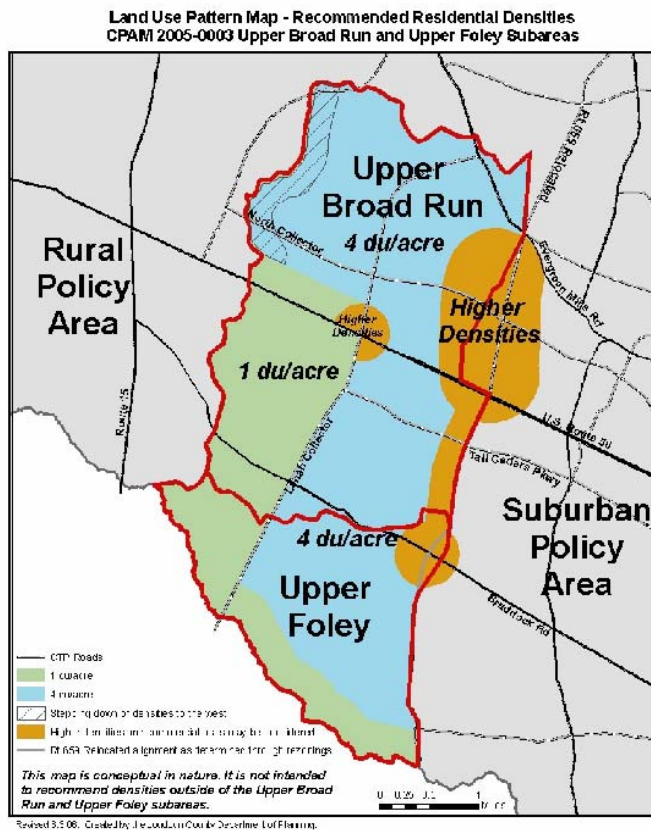
The Revised General Plan calls for residential uses within the Upper Broad Run and Upper Foley Subareas to develop as Rural Villages or Residential Clusters of predominately single-family detached housing. The Plan calls for residential densities in

these two subareas to develop in a clustered pattern of one dwelling unit per three acres or one unit per acre based on current zoning patterns with 50 to 70 percent open space. The Plan also encourages the development of non-residential uses in these Subareas that provide a transition from suburban to rural. Central water and sewer is planned for the subareas. In April 2004, the Board of Supervisors amended the Revised General Plan to extend sewer and water into the Transition Policy Area to help resolve environmental and health issues. A more detailed discussion of the existing conditions within the two subareas including existing environmental and heritage resources is attached (Attachment 7).



The Countywide Transportation Plan (CTP) calls for two types of regional roads in the Transition Policy Area, roads that connect major activities centers outside of the Transition Policy Area and roads needed to serve development within the Transition Policy Area. The planned roads for the two Subareas anticipate traffic volumes based on the densities currently recommended in the Revised General Plan.

LAND USE CHANGES



The proposed amendments support 4 dwelling units per acre development densities in most of the Upper Broad Run and Upper Foley Subareas (See map below). The concept recommended by the Planning Commission is for mixed use, suburban density, residential communities throughout the CPAM area with higher residential densities and commercial uses possible at key intersections and along the Route 659 Relocated corridor and lower densities adjacent to the Rural Policy Area to the west and Bull Run to the south.

The CPAM would also amend the Revised General Plan Planned Land Use Map for portions of the properties in the Suburban Policy Area near Arcola. The CPAM proposes to change the designations for

these properties from Industrial Community to Business Community which could introduce residential opportunities (Attachment 1, Current and Proposed Planned Land Use Maps).

ANALYSIS

Development Potential

During their review, the Planning Commission considered the following land use scenarios: (i) Scenario 1: current planned land use development; (ii) Scenario 2: build-out at the lowest density proposed among the seven active re-zoning applications in the two Subareas: 2.95 units per acre, (iii) Scenario 3: build-out at the densities proposed in the seven active re-zoning applications in the two Subareas and taking the average: 3.77 units per acre, and (iv) Scenario 4: build-out development based on the Planning Commission's recommendations (See Attachment 2, Build-out Analyses Methodology). The proposed change to the planned land use map within the Suburban Policy Area from Industrial to Business is included in Scenarios 2 through 4 (under Scenario 1 there would be no residential units in this area). All scenarios are based on the Recommended Land Use Pattern Map (See Attachment 1).

The estimated build-out should not be viewed as a final predictive effort, but rather as an estimate of potential. Conditions vary widely parcel by parcel and may be affected over time by market forces, technology changes, regulatory issues, and property owner decisions. The current methodology provides a conservative estimate of residential development within the study area.

Attachment 2 describes the approach for determining the development potential in the CPAM area including acreages applied for density calculations. The approach is similar to that taken during the Rural Policy Area discussion and is consistent with the original analysis provided to the Commission prior to their October 3, 2005 Public Hearing. That is, a parcel by parcel analysis based upon the Planning Commission recommended land use and density recommendations was performed (floodplain constraints were applied).

Scenarios

The Estimated Totals Table below outlines the maximum potential additional residential units and the associated population, students, and anticipated capital costs with each scenario. The transportation impacts associated with the July 6, 2006 revised draft policies are not part of this analysis, however, they will be adjunct to the active Countywide Transportation Plan (CTP) revision effort.

Capital Facilities

To determine the fiscal impacts of the potential development, the Capital Intensity Factor (CIF) has been applied. The CIF formula is structured to take into account that different housing types create different service demands. The CIF is determined by five variables: unit type, persons by type of unit, number of school age children by type of unit, the costs of different types of facilities and costs of schools. The Eastern Capital Facility Impact factors, as adopted by the Board of Supervisors on July 25, 2006, are used below. Capital costs do not include operating costs such as salaries, maintenance, debt service, etc.

Summary of Build-out Analyses

A summary of the build-out analyses for each of the Scenarios for the CPAM area indicates the following:

Table 1: Estimated Totals

	Housing Units	Population*	Students*	Anticipated Total Capital Costs	Development share of costs***
Scenario 1: Planned Land Use	4,608	14,423	3,825	\$215,741,952	\$ 0
Scenario 2: “Lowest” Rezoning Density	28,085	73,391	15,245	\$918,541,044	\$596,661,966
Scenario 3: “Average” Rezoning Density	32,565	85,808	18,006	\$1,081,653,812	\$740,126,675
Scenario 4: Planning Commission Recommendation**	33,821	89,289	18,780	\$1,127,383,642	\$780,348,031

**Population and students are calculated based on all residential units being occupied. Typically less than 100% of units are occupied at any given time. For instance, a typical vacancy rate for SFD and SFA units is 5%.*

***Assumes maximum density.*

****Assumes costs associated with “by-right” development and costs associated with affordable dwelling units required by the Zoning Ordinance. Affordable units represent 12.5% of detached and attached units and 6.25% of multi-family units.*

ISSUES

Throughout the process, issues were raised regarding land use, the fiscal impact of new development, increased traffic volumes and the lack of transportation analysis, and the need for workforce/affordable housing.

Land Use Plan

Over the course of its review, the Commission considered several density scenarios including two alternative land use plans for the Upper Broad Run and Upper Foley Subareas based on the background information provided in five issues papers presented to the Planning Commission on July 25, 2005 and general guidance provided by the Planning Commission regarding desired uses and densities: 4 dwelling units per acre in the Upper Broad Run Subarea; 3 dwelling units per acre in the Upper Foley Subarea, the lower density reflecting the proximity to the Occoquan watershed (See Attachment 4).

The Planning Commission is proposing a consistent development pattern in both Subareas. Draft policies support a predominantly residential community with limited retail and employment uses. The draft policies propose densities ranging from 1 dwelling per acre (1du/acre) to the west to 16 du/acre along the eastern edge of the subareas and at

major intersections. Taken together the overall build out is estimated at 33,821 units. Current policies would permit 4,608 units at build out.

Capital Needs

Analysis of specific facility and service needs was done early in the process based on the Commission's original proposal of 4 du/acre in the Upper Broad Run Subarea and 3 du/acre in the Upper Foley Subarea. The capital needs impacts were measured using the County's capital needs assessment. Adopted Capital Facilities Standards, as of September 2005, were used to estimate the need of additional facilities (e.g., schools, fire and rescue stations, sheriff stations, parks, and libraries) under two density scenarios (See Table 2 below).

Table 2	Public Facility Needs	
	Current Potential	Proposed Densities
Density	Existing Zoning (0.33 and 1.0 dwelling unit/acre)	UBR 4.0 dwelling units/acre UF 3.0 dwelling units/acre
Housing Units	4,571	27,977
Population	14,307	77,451
Students	3,657	15,997
Elementary Schools	2	9
Middle Schools	1	3
High Schools	1	2
Total Schools	4	14 (480 acres)
Community Parks	1	8
District Parks	0	3
Regional Parks	1	1
Total Parks	2	12 (665 acres)
Recreation Centers	1	1 (5 acres)
Senior Centers	1	1 (5 acres)
Libraries	0	1 (5 acres)
Public Safety Centers	0	2 (10 acres)

The Commission's recommendation that now includes residential densities of up to 4 du/acre in both Subareas, would increase the potential for residential units and subsequent capital needs. The proposed policies do not suggest specific proffer guidelines or facilities standards for the area that would address the deficit of County services in the Dulles community. Future rezonings in this area are not likely to solve the existing deficit of services under current capital proffer guidelines. Further, the analysis does not assess the annual operating costs which are significant.

Transportation

Transportation impact was measured in gross total traffic volumes for residential densities at 4 du/acre in the Upper Broad Run Subarea and 3du/acre in the Upper Foley Subarea. A sketch analysis by the Office of Transportation Services staff produced

estimated levels of service for key road segments (See Tables 3-5 below, prepared September 2005). In general, increased traffic volumes will have a serious detrimental effect on Route 50 unless regional improvements are put in place.

Table 3	Estimate of Total Traffic Generation (Average Daily Trips [ADT])	
	Current Potential	Proposed Densities
Density	Existing Zoning (0.33 and 1.0 dwelling unit/acre)	UBR 4.0 dwelling units/acre UF 3.0 dwelling units/acre
Residential Units	4,571	27,977
Employment-Retail	800 jobs	3,846,348 sq. ft.
Residential Traffic (ADT)	43,744	216,854
Employment Retail Traffic (ADT)	3,200	82,312
Total traffic (ADT)	46,944	299,166

September 2005

Table 4	Projected Traffic Increase Between 2005 and 2020 (ADT)¹	
	Road Links	Additional Traffic
	Route 50 west of Route 659 Relocated	56,649
	Route 50 West of Loudoun County Parkway	37,766
	Route 50 West of Pleasant Valley Road	28,324
	Route 50 at Route 860-Route 15	18,882
	Route 621 North of Route 860	18,882
	Route 659 Relocated South of Ryan Road	18,882
	Route 659 Relocated South of Braddock Road	9,441
	West Spine Road South of Braddock Road	9,441
	Tri-County Parkway South of Braddock Road	18,882
	West Spine Road West of Loudoun County Parkway	28,324
	Tall Cedars Parkway West of Loudoun County Parkway	18,882
	Route 50 North Collector Road West of West Spine Road	18,882
	Route 606 East of Loudoun County Parkway	18,882
	Loudoun County Parkway North of Route 606	9,441
	Braddock Road West of Route 659/West Spine Road	18,882

¹ Model assumes 251,772 total daily trips generated by the CPAM and that 188,829 of the daily trips are external trips. Internal traffic is traffic that stays in the local community as would be the case in a mixed use development pattern with local services, retailers and employment sufficient to allow people to live and work in the same community.

Table 5	Projected Levels of Service (LOS)			
Road Links	Current Modeling		Add CPAM	
	Lanes	LOS	Lanes	LOS
Route 50 west of Route 659 Relocated - Lenah	4	D	6	F
Route 50 : Lenah – Route 15	2 ^T	E	2 ^T	F
Route 50 West of Loudoun County Parkway	6 ¹	D	6 ²	F
Route 50 West of Pleasant Valley Road	6 ¹	F	6 ²	F-
Route 621 North of Route 860 Relocated	2	C	4	C
Route 659 Relocated South of Ryan Road	4	B	4	D
Route 659 Relocated South of Braddock Road	4	B	4	C
Route 659 South of Braddock Road	2	E	4	C
Tri-County Parkway South of Braddock Road	4	B	4	C
West Spine Road West of Loudoun County Parkway	4	C	4	E
Tall Cedars Parkway West of Loudoun County Parkway	Not Coded		4	C
Route 50 North Collector Road West of West Spine Road	Not Coded		4	C
Route 606 East of Loudoun County Parkway	4	C	4	D
Loudoun County Parkway North of Route 606	4	E	6	E
Braddock Road West of Loudoun County Parkway	4	A	4	C

¹ Route 50 interchanges were not assumed to be constructed by 2020.

² Interchange construction to be evaluated as part of Route 50 Task Force.

^T Traffic calming area.

Levels of Service are measured as follows:

Level of Service A: Average total delay of less than 10 seconds per vehicle.

Level of Service B: Average total delay between 10 and 15 seconds per vehicle.

Level of Service C: Average total delay between 15 and 25 seconds per vehicle.

Level of Service D: Average total delay between 25 and 35 seconds per vehicle.

Level of Service E: Average total delay between 35 and 50 seconds per vehicle.

Level of Service F: Average total delay 50 seconds per vehicle. Insufficient gaps of suitable size to allow a side street demand to cross safely through or enter a major street traffic stream. LOS F may not always result in long queues but may result in adjustments to normal driver behavior.

The transportation impacts associated with the July 6, 2006 revised draft policies are not part of this analysis, however, they will be adjunct to the active Countywide Transportation Plan (CTP) revision effort.

Workforce Housing

The draft policies do not specifically include workforce housing. Recommendations from representatives from the Housing Advisory Board (HAB) led to draft policies that speak to unmet housing needs within the County. Recent policy proposals from the HAB have not been evaluated with this CPAM.

RECOMMENDATION

The efficient development of areas that are within the utility service boundary of the County is important to minimize or defer the need to further expand service boundaries. Development at higher densities will also facilitate more affordable residential development. This was the approach used with the original Dulles South Area Management Plan when up to 6 units per acre could be developed. The concept failed in part because new development never achieved the 6 du/acre and because previous Boards determined the fiscal cost to be too high. The Board might overcome this issue by establishing a minimum density at a level that encourages a variety of unit types, by establishing a level and phasing of public services that can be achieved through proffers, public investment, or other means, and by linking non-residential growth to employment growth in the County.

Staff recommends that a more in depth analysis of the fiscal, economic, environmental, and transportation impacts be conducted prior to any increase in development potential to the Transition Area.

STAFF CONTACT: Cindy Keegan, Department of Planning

ATTACHMENTS

1. Draft Policies, CPAM 2005-0003, Upper Broad Run/Upper Foley Subareas with proposed land use maps
2. Build-out Analysis Methodology for Scenarios
3. Scope of Activities
4. Sympoetica Report
5. Letter from Fairfax County Planning Department dated August 24, 2006
6. Resolution from Town of Middleburg dated August 17, 2006
7. Issues Paper #1: Environmental and Heritage Resources